VOL. 119, ISSUES 1–3 17 MARCH 2005

JOURNAL OF HAZARDOUS MATERIALS

(Abstracted/indexed in: Applied Science and Technology Abstracts, ASM International/The Institute of Metals–Materials Information, Cambridge Scientific Abstracts, Centre de Documentation Scientifique et Technique–PASCAL database, Chemical Abstracts, CIS Documentation, Coal Abstracts, Current Contents (Engineering Technology and Applied Sciences), DECHEMA, Germany, Elsevier BIOBASE/Current Awareness in Biological Sciences, EMBASE/Excerpta Medica, Engineering Index Abstracts, Environmental Periodicals Bibliography, Geo Abstracts, GEOBASE, Laboratory Hazards Bulletin/Chemical Hazards in Industry, NIOSHTIC, Système de Documentation et Information Métallurgique)

CONTENTS

Part A: Risk Assessment and Management

Some characteristics of 3,7-dinitro-, 3,7-dinitroso- and dinitrate compounds derived from 1,3,5,7-tetraazabicyclo [3.3.1]nonane
J. Vágenknecht and S. Zeman (Pardubice, Czech Republic) 1

Solubility of chlorine in aqueous hydrochloric acid solutions
M. Alkan (Balikesir, Turkey), M. Oktay, M.M. Kocakerim and M. Çopur (Erzurum, Turkey) 13

Thermal decomposition of methylene-4,4′-di(ethylphenyl-carbamate) to methylene-4,4′-di(phenylisocyanate)
G. Lewandowski and E. Milchert (Pulaskiego, Poland) 19

Simple determination of performance of explosives without using any experimental data
M.H. Keshavarz (Shahin-Shahr, Islamic Republic of Iran) 25

Effectiveness of expedient sheltering in place in a residence
J.J. Jetter and C. Whitfield (Research Triangle Park, NC, USA) 31

Accidental releases of titanium tetrachloride ($TiCl_4$) in the context of major hazards—spill behaviour using REACTPOOL
T. Kapias and R.F. Griffiths (Manchester, UK) 41

Synthesis, characterization, thermolysis and performance evaluation studies on alkali metal salts of TABA and NTO
P.B. Kulkarni, G.N. Purandare, J.K. Nair, M.B. Talawar, T. Mukundan and S.N. Asthana (Pune, India) 53

Spectro-thermal decomposition study of 1,4-dinitroglycoluril (DINGU)
V.H. Khire, M.B. Talawar, K.V. Prabhakaran, T. Mukundan and E.M. Kurian (Pune, India) 63

Environmental risk assessment of hydrofluoroethers (HFEs)
W.-T. Tsai (Tainan, Taiwan) 69

Part B: Environmental Technologies

Experimental study of flammability limits of natural gas–air mixture
S.Y. Liao (Xi'an, PR China), Q. Cheng (Chongqing, PR China), D.M. Jiang and J. Gao (Xi'an, PR China) 81

Comparison of fly ash properties from Afsin–Elbistan coal basin, Turkey
S. Ural (Adana, Turkey) 85

Effect of salinity on nitrous oxide emission in the biological nitrogen removal process for industrial wastewater
S. Tsuneda, M. Mikami (Tokyo, Japan), Y. Kimochi (Saitama, Japan) and A. Hirata (Tokyo, Japan) 93

Phenol and substituted phenols AOPs remediation
O. Gimeno, M. Carbajo, F.J. Beltrán and F.J. Rivas (Badajoz, Spain) 99

Comparison of the treatment methods efficiency for decolorization and mineralization of Reactive Black 5 azo dye
E. Kusvuran, S. Irmak, H.I. Yavuz (Adana, Turkey), A. Samil (Kahramanmaras, Turkey) and O. Erbatur (Adana, Turkey) 109

Sorption study of an acid dye from an aqueous solutions using modified clays
Z. Bouberka (Oran, Algeria), S. Kacha (Sidi Bel Abbes, Algeria), M. Kameche (Oran, Algeria), S. Elmaleh (Montpellier, France) and Z. Derriche (Oran, Algeria) 117

Vitrified metal finishing wastes. I. Composition, density and chemical durability
P.A. Bingham and R.J. Hand (Sheffield, UK) 125

(Contents continued on page 266)

SCIENCE DIRECT®

Full text of this journal is available, on-line from **ScienceDirect**. Visit **www.sciencedirect.com** for more information.

0304-3894(20050317)119:1-3;1-X

05162

(Continued from outside back cover)

Catalytic activity of active carbons impregnated before activation of pinewood sawdust and nutshells to be used on the control of atmospheric emissions
M. da Conceição M. Alvim-Ferraz and C.M.T.B. Gaspar (Oporto, Portugal) 135
Characterization of the catalytic films formed on stainless steel anodes employed for the electrochemical treatment of cuprocyanide wastewaters
L. Szpyrkowicz, F. Ricci (Venice, Italy), M.F. Montemor (Lisboa, Portugal) and R.M. Souto (Canary Islands, Spain) 145
Effects of an electric or magnetic field on the radiolytic degradation of two biorefractory contaminants
S.-J. Zhang, H.-Q. Yu, Q.-R. Li and H. Yin (Anhui, China) 153
Sequencing batch reactor performance treating PAH contaminated lagoon sediments
A. Giordano, L. Stante (Bologna, Italy), F. Pirozzi, R. Cesaro (Napoli, Italy) and G. Bortone (Bologna, Italy) 159
Assessing effect of electrode configuration on the efficiency of electrokinetic remediation by sequential extraction analysis
D. Turer (Ankara, Turkey) and A. Genc (Zonguldak, Turkey) 167
Removal of Cr(VI) from aqueous solution by two Lewatit-anion exchange resins
F. Gode (Isparta, Turkey) and E. Pehlivan (Konya, Turkey) 175
Removal of lead from aqueous solutions by activated phosphate
M. Mouflih, A. Aklil and S. Sebti (Casablanca, Morocco) 183
Determination of the adsorption capacity of activated carbon made from coffee grounds by chemical activation with $ZnCl_2$ and H_3PO_4
A. Namane (Alger, Algeria), A. Mekarzia, K. Benrachedi (Boumerdes, Algeria), N. Belhaneche-Bensemra and A. Hellal (Alger, Algeria) 189
The effect of ionic strength and hardness of water on the non-ionic surfactant-enhanced remediation of perchloroethylene contamination
E.-S. Kim, D.-H. Lee (Seoul, Republic of Korea), B.-W. Yum (Daejeon, Republic of Korea) and H.-W. Chang (Seoul, Republic of Korea)) 195
A novel solubilization of phenanthrene using Winsor I microemulsion-based sodium castor oil sulfate
B. Zhao (Hangzhou, China and Lanzhou, China), L. Zhu and Y. Gao (Hangzhou, China) 205
Analysis of arsenic and some other elements in coal fly ash by X-ray photoelectron spectroscopy
A. Ohki, T. Nakajima, Y. Sakaguchi, A. Iwashita and H. Takanashi (Kagoshima, Japan) 213
Modification of surface properties of *Lentinus sajor-caju* mycelia by physical and chemical methods: evaluation of their Cr^{6+} removal efficiencies from aqueous medium
G. Bayramoğlu, G. Çelik, E. Yalçın, M. Yılmaz and M.Y. Arıca (Yahşihan-Kırıkkale, Turkey) 219
Adsorption of mercury by carbonaceous adsorbents prepared from rubber of tyre wastes
E. Manchón-Vizuete, A. Macías-García (Badajoz, Spain), A. Nadal Gisbert (Alicante, Spain), C. Fernández-González and V. Gómez-Serrano (Badajoz, Spain) 231
Effect of easily degradable substrate on anaerobic degradation of pentachlorophenol in an upflow anaerobic sludge blanket (UASB) reactor
D.-S. Shen, X.-W. Liu and H.-J. Feng (HangZhou, PR China) 239

Short communications
Total concentrations and fractions of Cd, Cr, Pb, Cu, Ni and Zn in sewage sludge from municipal and industrial wastewater treatment plants
C. Wang, X. Hu, M.-L. Chen and Y.-H. Wu (Nanjing, PR China) 245
Crab shell-based biosorption technology for the treatment of nickel-bearing electroplating industrial effluents
K. Vijayaraghavan, K. Palanivelu and M. Velan (Chennai, India) 251

Book reviews 255

Vol. 119
Iss. 1 - 3
MAR 17

2005